Distribution System Reliability Projects Illinois District (1999 - 2002)

<u>Turkey Hollow Road</u> (circuit 13-104-2, Rock Island County, Illinois)

This project involves replacing and upgrading 3 miles of overhead three phase distribution line which is approximately 40 to 50 years old. The improvement increases the reliability to 295 customers along Turkey Hollow Road from Taylor Ridge to Andalusia Road. The project was started in 1998 and is approximately 60% complete. The remainder will be completed in 1999.

Budgeted Cost: \$45,000 in 1999.

4 kV to 13 kV Conversion (Sub 29, circuits 4-29-2, 4-25-1, 4-U-2, Moline, Illinois)

The ongoing conversion of the 4 kV overhead distribution system continues with the elimination of 4 kV substation 29 and circuit 4-29-2 at 7th Street and 28th Avenue, Moline in 1999. Additional 4 kV conversion is also planned in 1999 for radial 4 kV taps on circuits 4-25-1 and 4-U-2, also in Moline. The five year goal for the 4 kV system in Rock Island and Moline is to convert all remaining radial taps, and Substations 20 and 23, and their associated circuits, by 2003.

Budgeted Cost: \$ 60,000 in 1999

\$ 75,000 in 2000 \$ 75,000 in 2001 \$ 75,000 in 2002

Swedona 4 kV Conversion (circuit 13-101-4, Swedona, Illinois)

This project converts the 4 kV "V" phase overhead circuit on Knoxville Road from Meadowgate Road to Camp Creek Road to 13 kV. The principle objectives of the project are improved voltage regulation to the 36 customers in the vicinity of the town of Swedona, and the continuation of the elimination of the 4 kV distribution system. The project is expected to be completed in 1999 and 2000.

Budgeted Cost: \$12,000 in 1999

106th & 95th Street Rebuild (circuit 13-43-1, Rock Island County, Illinois)

This project involves the replacement of approximately 100 spans of 2.4 kV single phase overhead delta primary. The improvement increases the reliability to approximately 17 residential customers. The project is expected to be completed in 1999 and 2000.

Budgeted Cost: \$75,000 in 1999

\$75,000 in 2000

110th Street & 145th Avenue Voltage Regulators (circuit 13-112-1, Mercer County, Illinois)

A load flow study performed on a rural section of circuit 13-112-1 indicated potential voltage problems when a new hog confinement facility starts operations in the summer of 1999. A project to install additional voltage regulation was completed 1999. This will provide adequate voltage for the new hog operation and improve the voltage regulation to several dozen existing rural residential and commercial farming customers served from this line section.

Budgeted Cost: \$20,000 in 1999

West 3rd Street & 104th Street Rebuild (circuit 13-43-1, Coal Valley, Illinois)

This project rebuilds and reconductors West 3rd Street and 104th Street from 106th Avenue, north approximately 2,500 feet. This will provide the ability to better sectionalize and fuse this circuit which serves a sensitive nursing care facility that has been experiencing an unacceptable number of blown fuses due to weather related problems. The project is anticipated to be completed in 1999 and 2000.

Budgeted Cost: \$30,000 in 1999

Moline Airport Industrial Loop Underground Rebuild (circuit 13-43-1, Moline, Illinois)

This project involves replacing approximately 6,600 circuit feet of three phase 13 kV underground cable serving the industrial / commercial area south of the Moline Airport. Approximately 19 customers are served from this underground loop which has reached the end of its useful life. The project was started in late 1998 and is expected to be completed by year end 1999.

Budgeted Cost: \$80,000 in 1999

Ridgewood Road & 85th Avenue West Underground Rebuild (circuit 13-18-1, Milan, Illinois)

This project involves replacing approximately 1,000 feet of 7,620V single phase underground primary cable in a urban residential subdivision. This radial circuit serves 34 residential homes and is reaching the end of its useful life. The replacement circuit will tie the customers into an adjacent circuit in the subdivision and provide a looped system with improved reliability. The project was started in 1998 and will be completed by year end 1999.

Budgeted Cost: \$15,000 in 1999

Oil to Vacuum Recloser Changeouts

A program was started in 1999 to start replacing older three phase reclosers with new vacuum reclosers. The objectives of the program are to reduce maintenance expenses associated with the oil reclosers and to provide improved control capabilities affecting how the reclosers operate during fault conditions. Two three phase recloser changeouts are budgeted to be purchased and installed in 1999.

Budgeted Cost: \$34,000 in 1999